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DESCRIPTION

OF

STOVES, FURNACES,

BATH TUBS,

GARDEN VASES,

AND

VENTILATORS,

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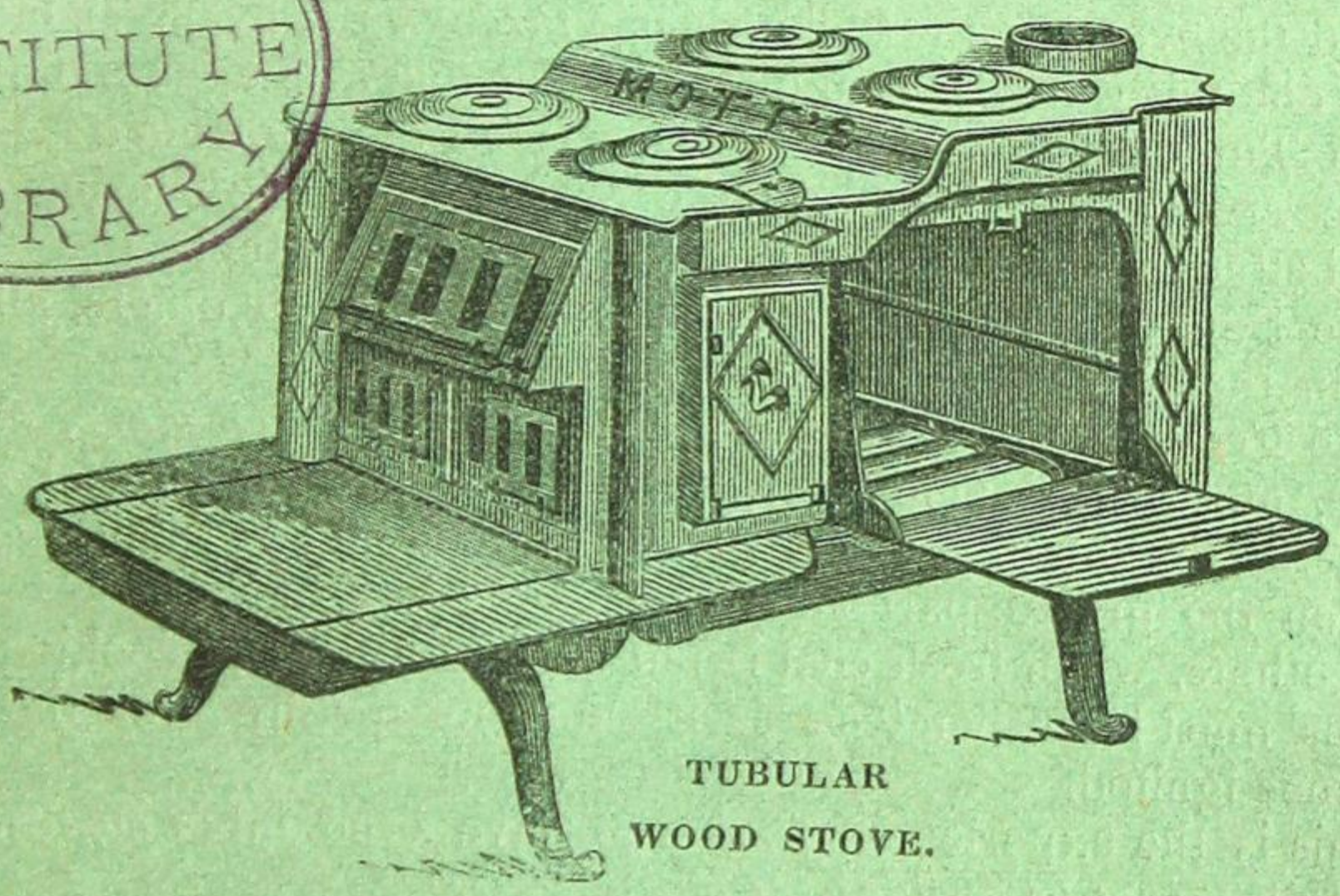


TUBULAR

WOOD STOVE.

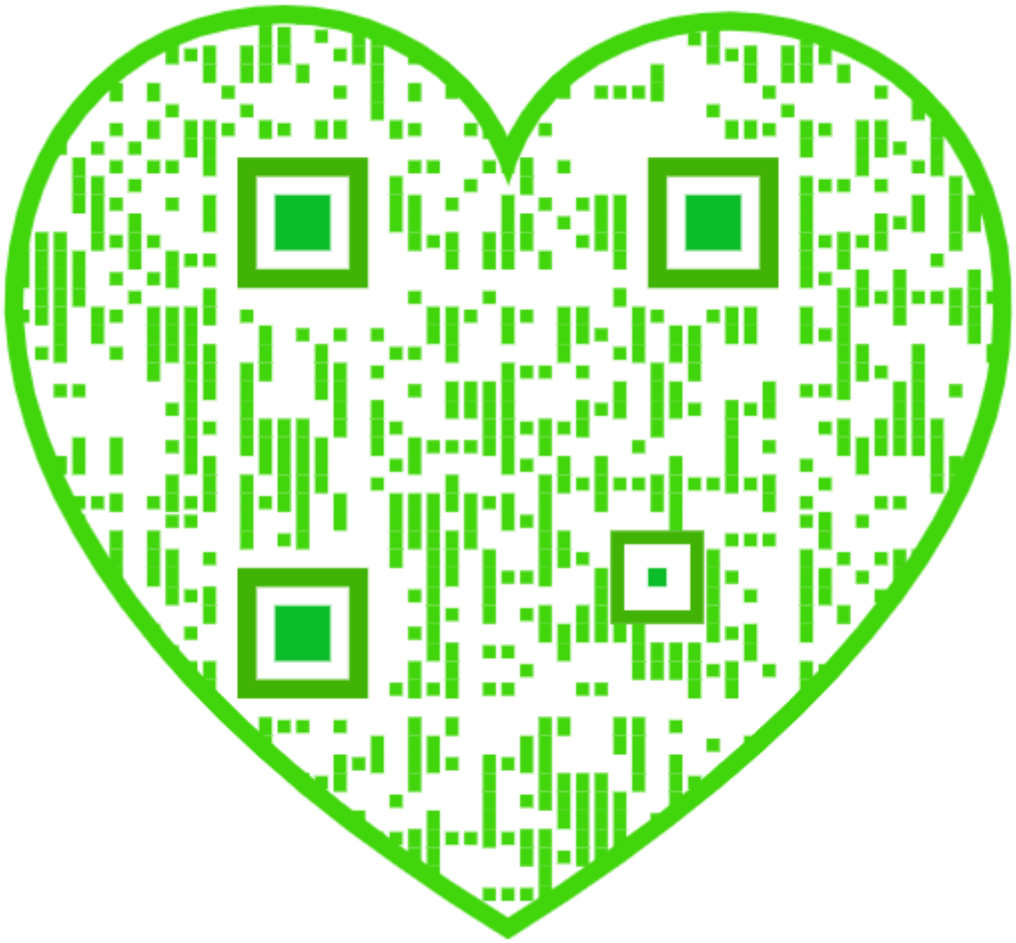
MANUFACTURED AND SOLD AT

MOTT IRON WORKS, MORRISANIA;

AND AT

No. 264 WATER STREET,

NEW-YORK.



ONE

SILVER CUP,

EIGHTEEN

SILVER MEDALS,

BESIDES

MANY DIPLOMAS,

HAVE BEEN AWARDED

THE ARTICLES DESCRIBED IN THIS PAMPHLET,

BY THE SEVERAL FAIRS

IN NEW-YORK, BOSTON, ALBANY,

AND OTHER PLACES,

AT HOME AND ABROAD.

At Philadelphia,

the Stoves were put in operation before the Premiums were awarded.

☞ The TUBULAR OVEN STOVES differ from all others in the following important particulars: In others, the draft is under and around the oven; in the Tubular, it is *through* the oven. In others, about one third the surface of the under flue acts upon the oven; in the Tubular, all the flue surface is *in the oven* consequently THREE TIMES more heat must be radiated into it—causing it to bake better on the bottom, and with much less fuel.

The SELF-FEEDER differs from others thus: In others, all the coal in the stove is burning at the same time.

The Feeder being on the principle of an *inclined plane*, closed above, and grated below, only the lower part of the coal is ignited, that on the upper plane sliding down, and replenishing the coal on the grated part as it is consumed.

In others, when fresh coal is put into the stove, all cooking operations must be suspended—as it smothers the fire until the new becomes ignited.

This is the experience of all who have used other stoves, and the evil *cannot be avoided.*

By the Feeder, the new supply is placed on the closed or upper part of the plane—not on the burning coal—causing no interruption to the operation of cooking.

With the Feeder, there is less trouble; the coal burns better, the fire is much sooner made, and under better control.

The Feeder gives a *thin, clear fire*, the importance of which is known to all who use steam engines.

READ AND LOAN TO YOUR NEIGHBOR.

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THE

WHYS AND THE WHEREFORES.

THE SELF FEEDING COOKING STOVES were invented in 1834. The first offered for sale in any quantity was in 1835. The ovens and fixtures of these were small, the fireplace large, and the castings rough and heavy. This resulted from the want of practical experience by the inventor, who was then a grocer.

The principle upon which they were constructed was good, as after experience has proved. The faults, if they may be so termed, were in form and arrangement, or the style of finish.

The success of these, and a few other stoves, brought many competitors into the business, which was at that time very profitable. Improvement followed improvement, both in stoves and in castings, in quick succession—probably more than in any other article of manufacture.

As rapid as improvements were in other stoves, the SELF FEEDER kept pace with the best of them; every succeeding pattern greatly excelled that which preceded it, as evidenced by the PREMIUMS awarded at every succeeding FAIR, from 1835 to 1842, by the Institutes in the city of New York, and for the last two years by those of Boston and Philadelphia. The improvements in the New Patterns of 1842 and 1843, including the Tubular, the Triumph, and others, (the old patterns having been all burnt in February, 1842,) have been great, far beyond that of any former period. Stoves are now made that will do as much work with one third the fuel as those of 1835 to '37, and sold at about one third the price—yet there are (I am sorry to say) some dealers who purchase the old Self Feeder, and point to it with ridicule as the celebrated *Mott Stove*.

I regret that any have to resort to such disreputable means to sell their own articles. One might as well refer to the little 7 by

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9 Sun newspaper of 1833, to prove that there was no improvement in its present enlarged sheet.

The stoves of the present year are all cast and finished at the proprietor's works, under his superintendance; are made from the first quality of pig iron, of sufficient weight and thickness to insure durability, mounted and put together with the utmost care—the joints of those having descending drafts being as close and tight as those of stoves made with sheet iron. They cannot fail to work well.

Importance of the Self Feeder in using Coal.

From a series of experiments, commenced at the early introduction of anthracite coal and continued for several years, (originally as a matter of inquiry, without any idea of making it a source of profit,) the proprietor was led to the following conclusions:

First: To use the coal advantageously, and to make a quick and lively fire, it should be small, for the same reason that we reduce the size of wood to produce the same result.

Second: That it should be burnt in thin layers, so that the body or depth of coal should not obstruct the draft.

Third: That as the coal has but little flame, no air should enter the stove between the fuel and the utensils, but should pass through the fire.

Fourth: That to *Bake* well, a very quick draft is necessary, to carry the hot air from the fire around the oven before the heat is lost through the top and other plates.

To carry these principles into effect, the

SELF FEEDER

was invented, which may be termed a hopper, or rather an inverted coal hod, having an inclined bottom, combined with the fireplace of any stove of ordinary construction.

Its advantages over all other modes are:

1. The grate in connection with the cross plate, under which the coal slides, is formed to have at all times a uniform depth of coal on fire.

2. The coal being poured into the feeder, and not upon that which is burning, as in all other stoves, does not deaden the heat or interrupt the operations of cooking.

3. As the Feeder holds much coal that is not ignited, the stove may be left for hours without attendance, and have on return a bright fire and a uniform depth of coal burning.

4. The sweeping of the coal vaults, or wet, damp coal, any that is not dust, may be used; the fire on the grate drying and heating it, so that it will ignite freely when it slides under the cross plate.

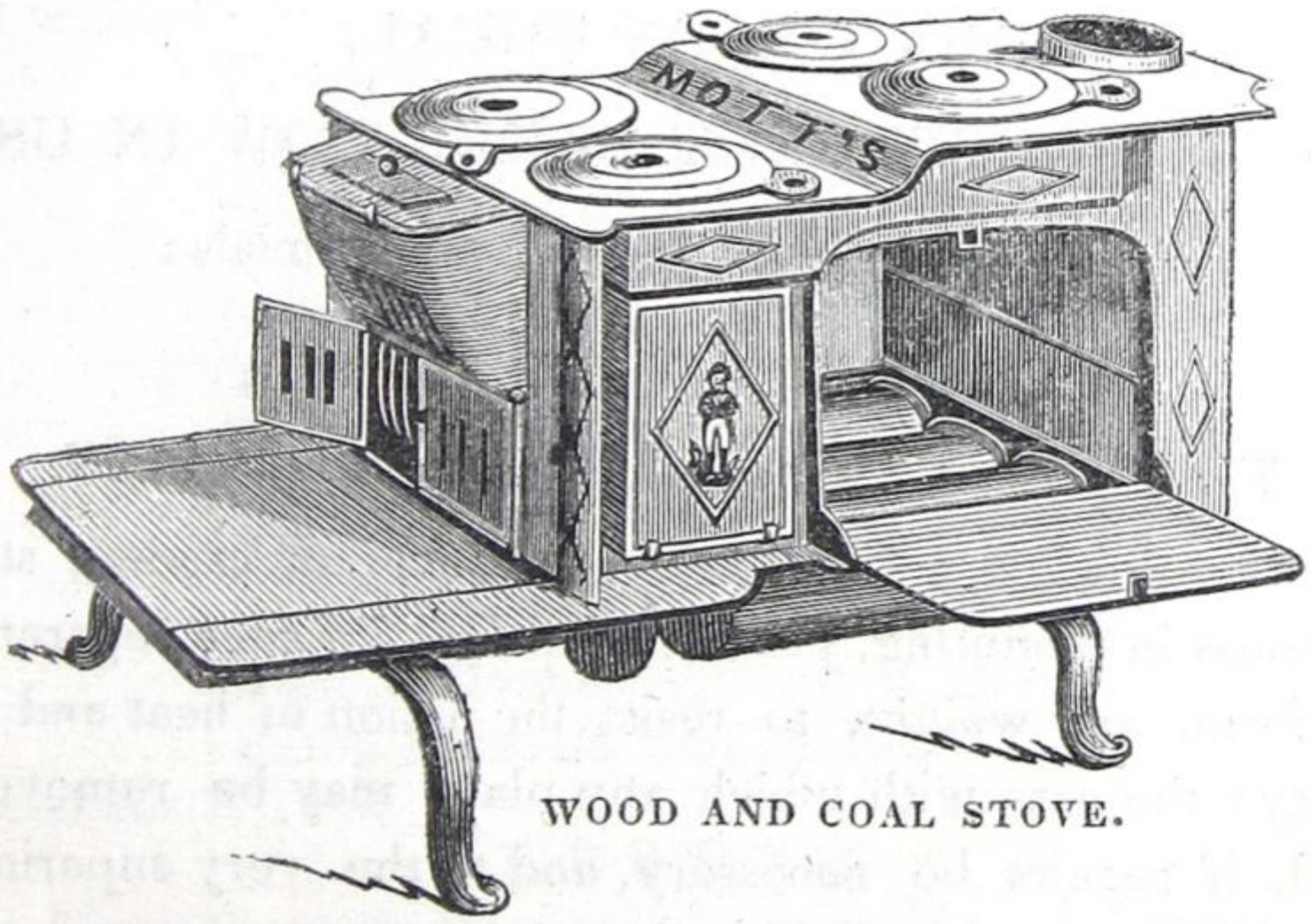
5. When the stove is so fed with coal, no gas will escape into the room.

☞ All the Cooking Stoves described in this pamphlet will burn either wood or coal. Those designed for country use have a latticed front, which, when opened, gives the stove a light and cheerful appearance.

The Stoves and Patterns made since the fire of February, 1842, are as follow:

TUBULAR OVEN COOKING STOVES.

Patented in 1842.



WOOD AND COAL STOVE.

They are furnished with all the necessary utensils usually found in other stoves.

INSTITUTE LIBRARY

The NOVELTY of these Stoves consists in heating the oven by TUBES, (which form the under part, as shown by the cuts, on the principle of the locomotive and interior or return flue steam boiler; that is, the heat is conducted from the fireplace through the tubes within the oven. By this plan, the bottom of the oven of a stove having revertible flues, becomes as hot, or more so, than the top; the heat from all parts of the *tubes* being radiated into the oven; whereas by the old plan only about one third the heat from the flues acts upon the oven through its bottom plate, whilst that from the sides and under part of the stove is radiated into the room. It will readily be perceived that if the most approved of the old plan worked well, THIS MUST WORK BETTER.

Any person conversant with the modern steam boiler, must be aware of the immense advantage in BAKING, and the saving of FUEL, by this mode over the old plan of conducting heat around on the outside of the oven. The articles to be baked rest upon the tubes, which are framed together, and can be lifted out and in through the oven door, to clean them when necessary. The stoves will burn hard or soft coal, or wood, with equal facility.

Experience of the past winter has proved this oven to be the

MOST NOVEL, MOST PERFECT,

MOST ECONOMICAL,

AND MOST EFFICIENT BAKER NOW IN USE,

As shown by the following testimonials:

In NEW-YORK City,

The American Institute Awarded a Silver Medal,

For "its finished workmanship, neatness of casting, strength and firmness in mounting, perfect adaptation of each separate plate in size, form, and weight, to resist the action of heat and insure durability; the ease with which any plate may be removed and replaced, if repairs be necessary, and to the very superior construction of the oven for baking."

Doctor Bailey, of this city, has kindly favored me with the following certificate: He assures me that he has purchased a stove almost every year since the introduction of coal for domestic use:

NEW-YORK, June 5, 1843.

DEAR SIR—It affords me pleasure to state to you, that I give your "TUBULAR OVEN COOKING STOVE," a decided preference over any other that I am acquainted with; its great excellence appears to be in the beautiful and equal manner of its Baking, which is so decidedly good that I can cheerfully recommend it to my acquaintances, &c. With respect, yours,

BENJAMIN BAILEY,
384 Grand street.

To JORDAN L. MOTT.

☞ Many hundreds may be referred to in this city and vicinity.

PHILADELPHIA.

The Franklin Institute at their late Fair awarded *Two Certificates of Honorable Mention* to my articles. Some of the users in that city have voluntarily presented the following:

The undersigned, citizens of Philadelphia, having had in use "MOTT'S TUBULAR OVEN COOKING STOVE," are fully satisfied of its excellence as a Cooking Stove for the use of Anthracite Coal; the peculiar and ingenious construction of the oven renders it admirable for Baking or Roasting, and completely answers the purpose intended. The common objection to stoves of this shape that the oven is useless, is entirely obviated by the contrivance of Mott's Oven. The draft of this stove is strong, the fire burns freely, and the kitchen sufficiently warmed; in short, we consider it superior to any stove we have heretofore used, and confidently recommend it to those who wish to purchase a Cooking Stove, which will neither give trouble nor cause disappointment.

James Simpson, 26 Elfreth's Alley.
Charles B. Trego, 186 Pine st.
H. I. Pepper, 66 Chesnut st.
Robert Henderson, 163 North st.
Clement S. Hughes, 467 South Second st.
David Lynch, 195 South Fourth st.
Isaac C. Price, Ridge Road, above Spring G. st.
John F. Walker, Duke st. below Newman.
Isaac B. Ward, Camden, N. J.
Abr'm Engard, Fourth st. and Bran.
John J. Deminger, First st. above Oliver.
Philip Rice, 68 Lombard st.

December 3, 1842.

BOSTON.

The Massachusett's Mechanics' Charitable Association awarded me, at their late Fair, *One Silver Medal and One Diploma.*

One dealer in Massachusetts writes as follows: "The public have been so long humbugged with worthless Coal Stoves, that

the TUBULAR requires only to be known, to insure its going into general use."

Another: "I cannot sell any other Stove where the Tubular is known."

ALBANY.

The State Agricultural Society awarded me *One Silver Medal* and *One Diploma.*

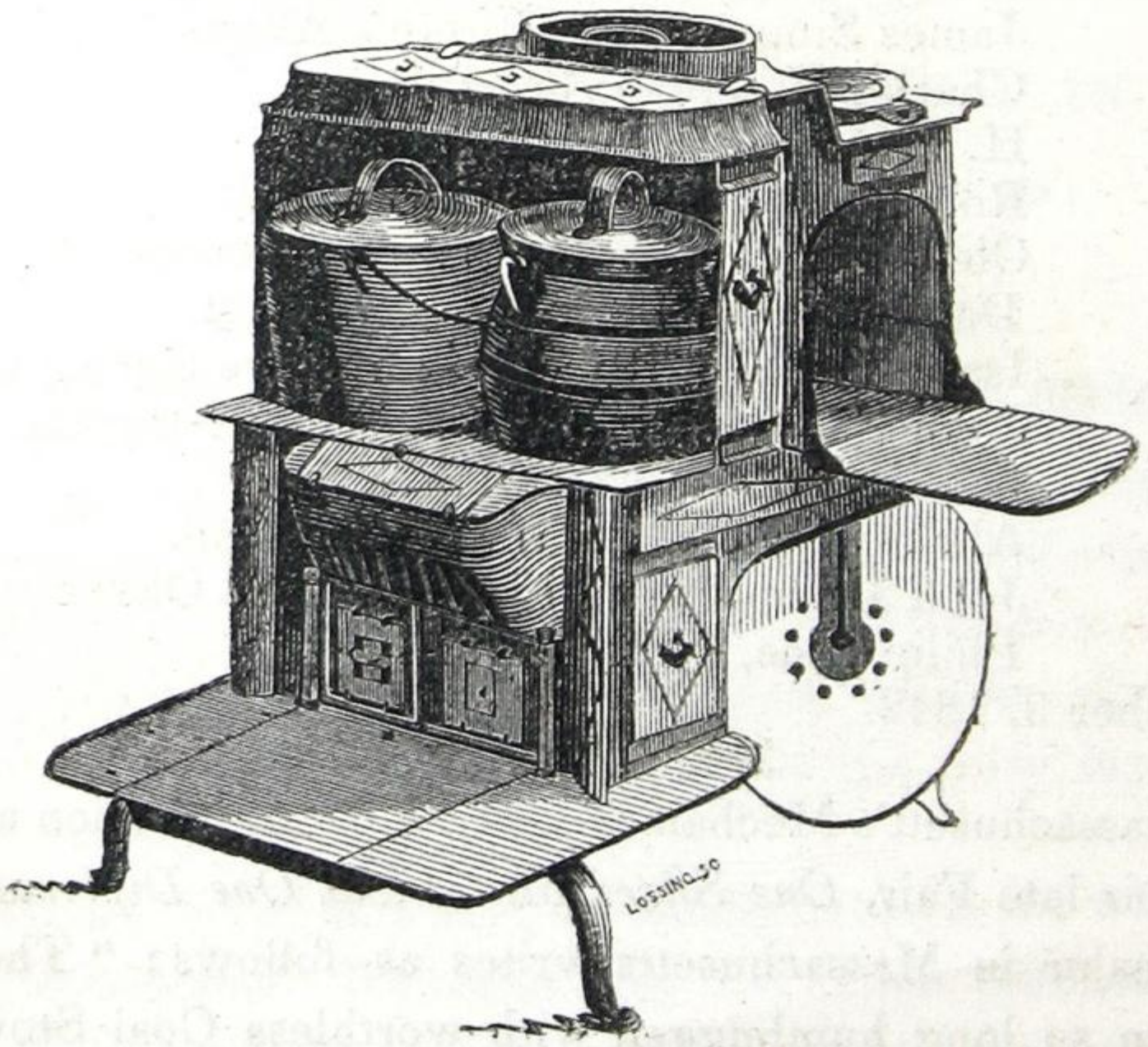
A DEALER IN THE COUNTRY

says, "I have made it a practice for several years to try nearly all the new stoves that are made, having had four or five different stoves in my kitchen during a winter, and I can truly say without an exception, the 'TUBULAR OVEN' is far, very far, superior to any of them. It is the BEST BAKER I have ever seen, and a good Baker should be the grand *desideratum* in selecting a Cooking Stove. That must be a poor thing indeed that will not boil with a good fire. With our present experience, we can burn coal in an oyster rake or an iron basket. My folks would not part with the Tubular Oven Stove on any account. It is the very

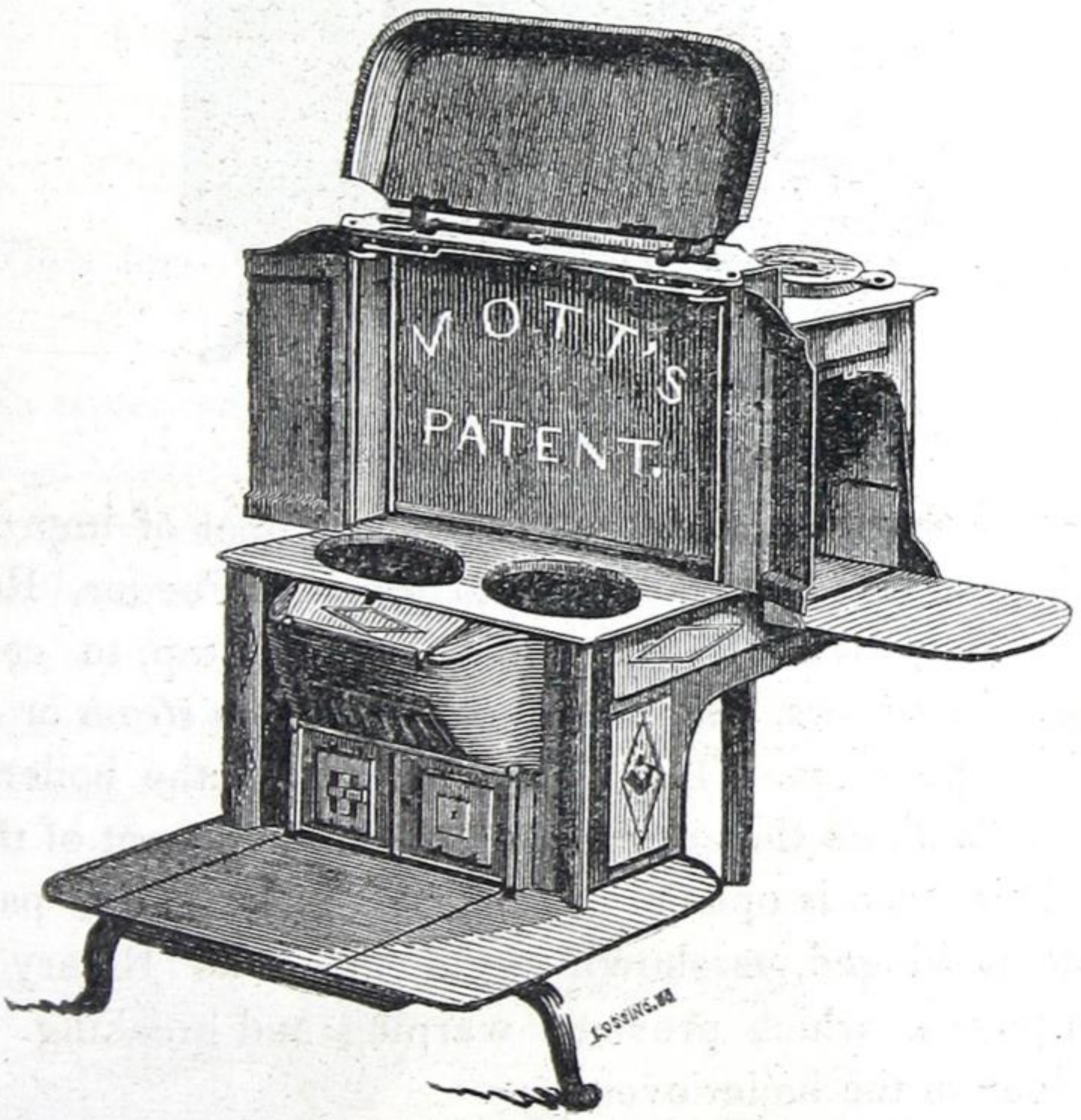
Napoleon of Stoves!"

TRIUMPH STEAM CONDUCTOR.

Patented in 1843.

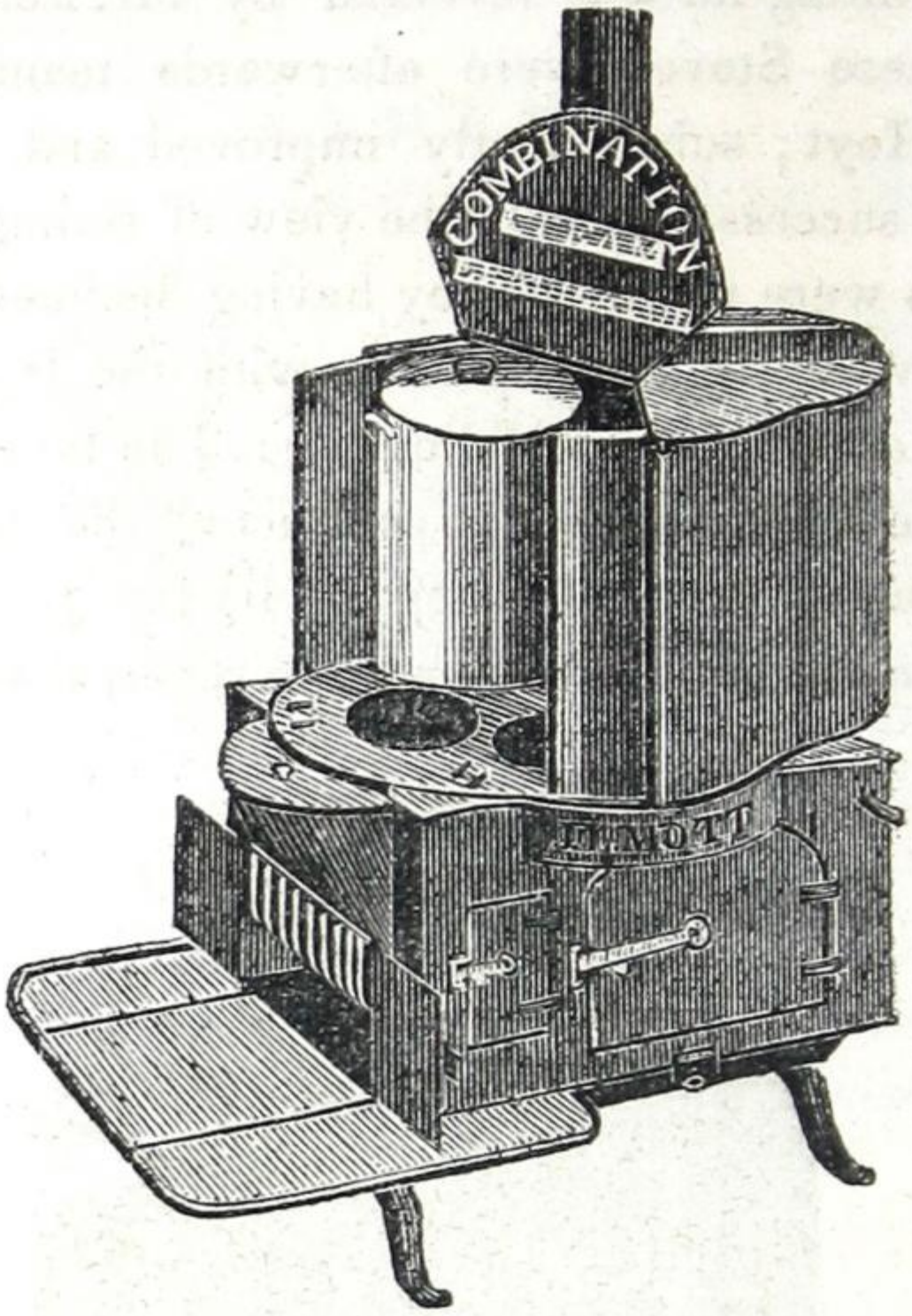


The original of this class of stoves was made by Phylogius Holly, of Red Hook, in 1821: the top plate was not hinged. This hinged or lifting lid was invented by Mr. John Graham, of this city. These Stoves were afterwards manufactured and sold by Ezra Hoyt; subsequently improved and sold in large numbers by his successors; with the view of selling to whom the present patterns were made. They having declined to purchase, the Stove is now offered to the public, with the improvements of 1843. Among others are the following: The lid and jambs, between which the boilers are set to conduct off the steam, are so arranged and connected that in raising the lid the jambs are thrown open, (as seen in the cut,) to facilitate the removal of the boilers.



The flues, under and over the oven, are formed to direct the heat all under or all over, or to be equalized around the oven, that baking may be done even on all parts, without turning the articles. The oven is very large. The fireplace is fitted for burning any kind of coal, Lehigh, Lackawana, or Schuylkill, or wood. The stove will please those who prefer an ascending to a descending draft; also, those who cook in their eating or sitting rooms.

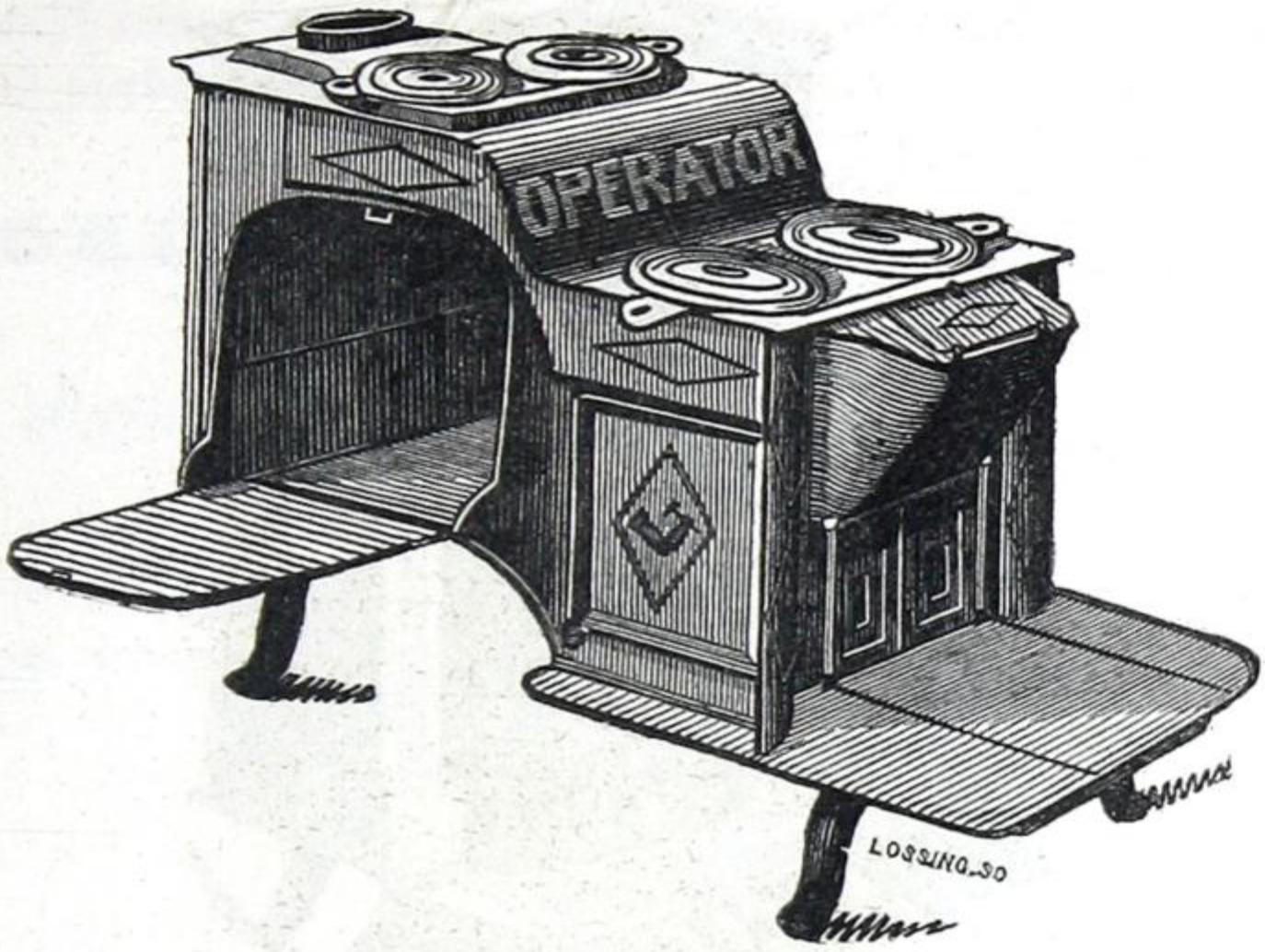
THE COMBINATION STOVE.



The stove that embodies the greatest number of improvements is the COMBINATION; in addition to the Self-Feeder, Revertible Flues, and Improved Roaster, it has a drum top, to completely inclose all the boilers, when required, so that no *steam* or *smell* can escape into the room. The plate upon which the boilers set is a Rotary, to facilitate the getting the boilers in and out of this boiler oven. This oven is opened in front by sliding doors; part of the top plate is hinged, as shown in the cut. The Rotary plate is made in pieces, which prevents warping and breaking. Baking can be done in the boiler oven.

The Tubular, Triumph, and Combination will bake well on all sides, without turning the articles or the oven. In this consists the good Baker. A coffee roaster will make a good oven, if kept in constant motion.

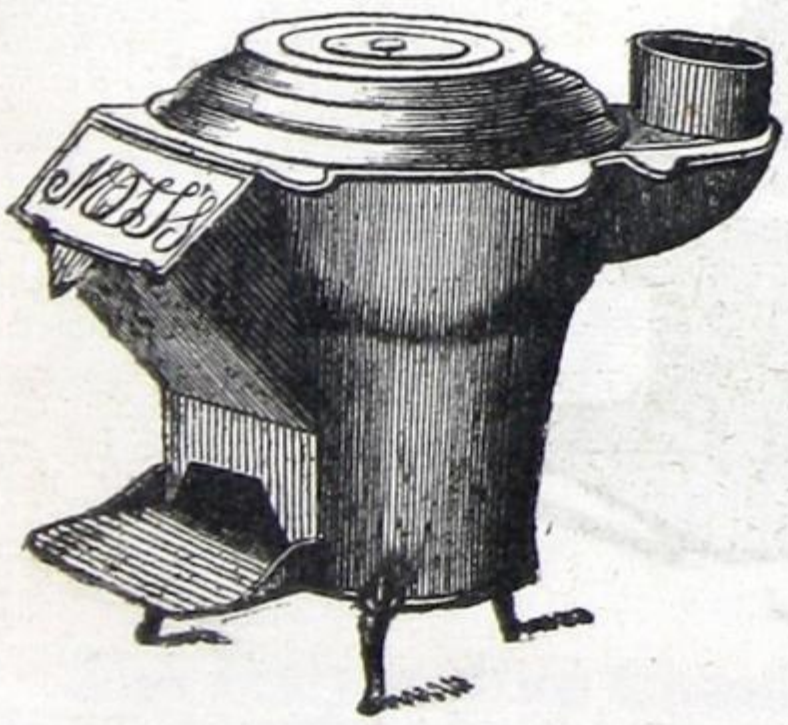
OPERATOR COOKING STOVE,



With Flues under and over the Oven, similar in arrangement to the Self Feeders of 1836,

Is neat in appearance, and has all the recent improvements, large oven, large fixtures, &c., and drop oven doors. The flues under the oven are raised higher than in ordinary stoves that have the premium flues, to prevent being clogged with ashes.

This class of stoves is the most simple to cast and mount; and being composed of a less number of plates, is the lowest priced one manufactured.



CINDER BURNER,

OR

Hard Coal Furnace.

With two feet of pipe, will burn hard coal or cinders, when used in the fireplace or the yard, and makes a neat stove in winter.

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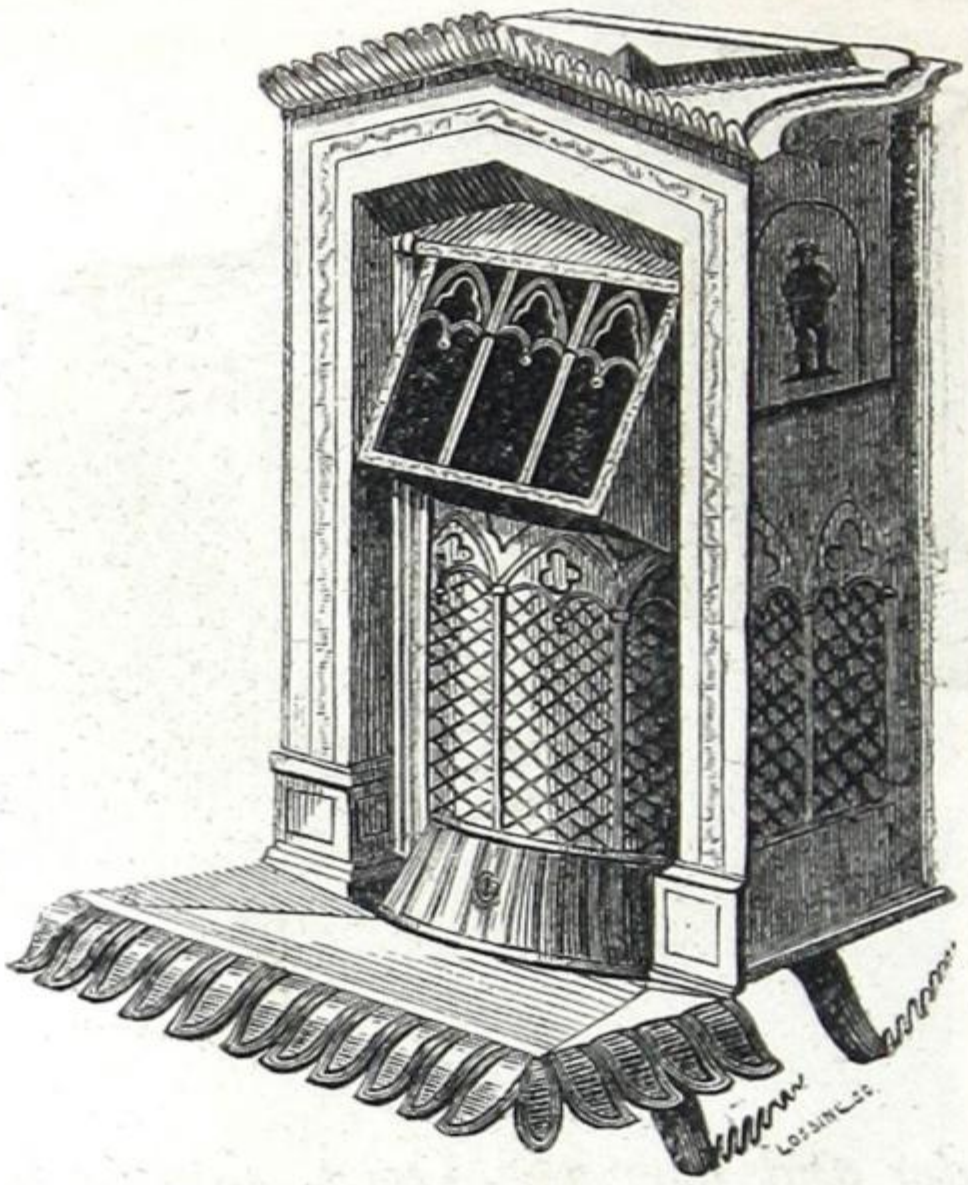
PARLOR or OFFICE STOVE,

From a new style of Patterns, beautiful in Appearance, simple in Construction, and admirably adapted for the purpose designed:



Presents a bright and cheerful fire; requires but little attention; and will burn for weeks, if required, by filling the feeder night and morning. The ashes may be freed without dusting the room. By a simple contrivance, air may be admitted between the fire and the mica front, which has the effect to modify and soften the heat, and make the stove as pleasant as an open fire.

Furnace for Heating Smoothing Irons.

This Furnace will heat at one time thirty-two Irons, and is well adapted for large Hotels and Public Institutions. They are

used at the Astor House, Globe, and Howards' Hotel, in the House of Refuge, St. John's College, in the State Lunatic Asylum at Utica, and at the Collegiate Institute at Flushing; at which Institution it is also used as a hot air furnace for warming the chapel; also for boiling, by means of tubes, from 60 to 100 gallons of water.

CALORIFER or HEAT PRODUCER,

(Patented in 1835, 1836, and 1843.)

For Warming Churches, School Rooms, Halls, Fancy Stores, Steamboats, &c.

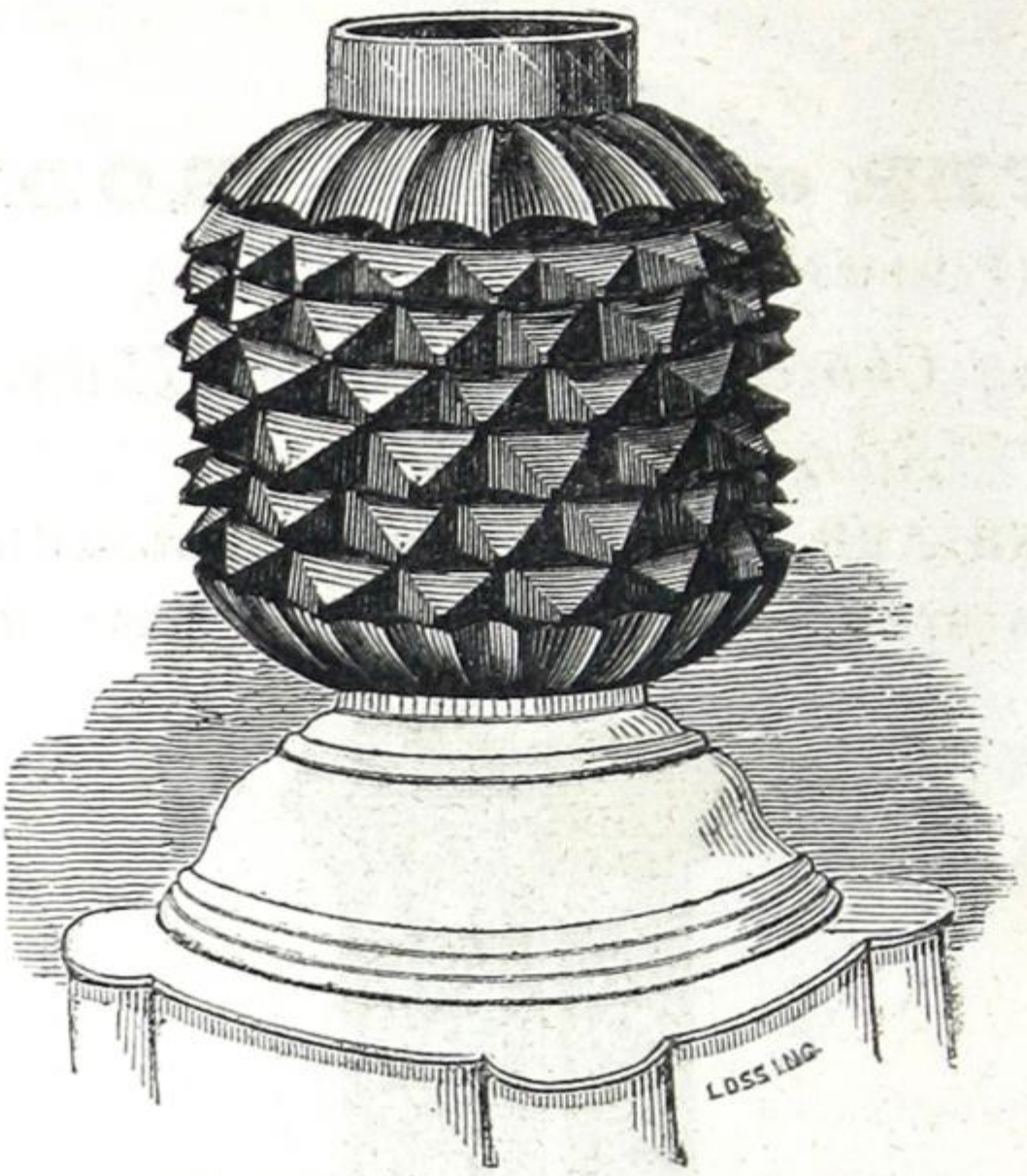
THE PATTERNS ARE OF THE MOST SPLENDID ORDER.

These stoves are powerful heaters and very durable.

The Body or Fire Chamber is made in small sections or rings, to insure durability, the exteriors of which are made in points the sides at right angles to each other, making the outer sur-

face three times that of the inner. The heat is radiated in every possible direction. They are not lined with bricks, give out an intense heat, and will endure for years.

This cut represents the outside of the Fire Chamber, stripped of the ornamented covering:



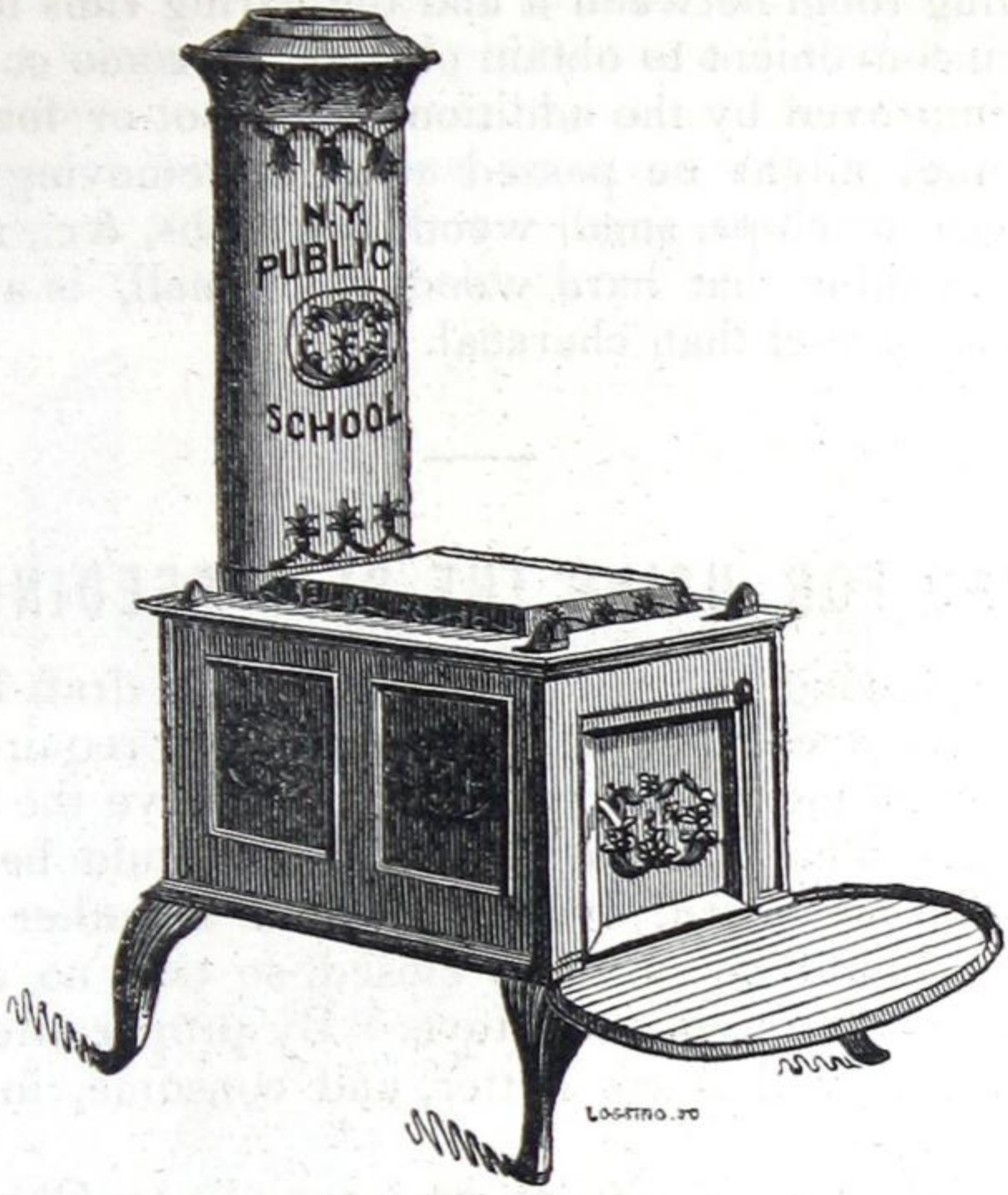
NOTE.—It is a well known fact that all cylinder or other stoves exposing equal surface to fire and air, break or burn out about four to five inches above the grate. This is caused in a great measure by unequal expansion; that part of the stove being heated more intensely than either above or below. If the iron be tough, every time the fire is made that part will expand a little more than the other parts, and will continue to stretch at every heating until it bursts open like ripe fruit. If the iron be hard, it is very apt to break during the first month's use.

To prevent this breaking, was one of the principal objects in making the ring or sectional stove, each ring or section being heated and expanding separately, is relieved from all strain, and when cold returns to its original size. If a piece of iron be heated equally in all parts it may burn out but will not break.

The following is the claim to the patent issued in 1835:

"What I claim is the forming of the exterior or shell of furnaces or fireplaces, for stoves of various kinds, the bodies of gas retorts, and other apparatus which are to be exposed to great alternations of temperature, by the combination of separate rings, rims or frames, of metal, usually of cast iron, by which means any difference in expansion in the respective parts may take place without the danger of breaking, while any portion that is defective may be easily removed, and its place supplied." J. L. M.

Large Wood Stoves for Churches, School Rooms, &c.



These Stoves have been made under the direction of a Committee of the New-York Public School Society, who have about seventy schools, using over two hundred stoves, and who design to replace them with these as the old stoves give out.

The plates are very heavy, being from $\frac{1}{4}$ to $\frac{3}{4}$ of an inch in thickness. Three sizes. The fireplaces being of the following length: No. 1, 18 inches; No. 2, 23 do.; No. 3, 30 do.

For the comparative durability between light and heavy stoves, reference is made to the wood stoves in St. Paul's and in the North Dutch Church, which were made by Mr. George Youle, previous to 1820. The plates are at least half an inch thick.

☞ The lettering on the pipe can be changed to order.

PORTABLE CHARCOAL AND CHIP FURNACE.

These are improvements on the ordinary domestic furnace. The design has been to adapt them to the use of the different sizes and kinds of kitchen utensils, and to make one furnace answer where many have heretofore been required. The construction is such that the bottom of any round utensils, whether flat or globular, with or without legs, would readily fit the top,

the recesses receiving the legs, the bottom resting upon the ridges, leaving room between it and the flaring rims for draft.

It being inconvenient to obtain charcoal in some country places, they were improved by the addition of a shoot or feeder, through which the fuel might be passed without removing the boilers; either charcoal or chips, small wood, corn-cobs, &c., may be used. Many persons think that hard wood, split small, is a cheaper and more convenient fuel than charcoal.

DIRECTIONS FOR USING THE SELF-FEEDING STOVES.

All stoves having revertible flues, with the draft from the fire, first all over the oven, then descending behind, require, on putting up for use, much more care than those that have the direct or ascending flues. The joints of the stoves should be air tight, if possible. The fire-board, oven, flues, and all other openings to the chimney, should be properly closed, so that no air can enter without passing through the stove. By proper attention to the above, the stove will work better, and consume, in some cases, one third less fuel.

The revertible draft is similar in principle to Olmstead's, Attwater's, Spoor's, and the Reverberator of this city, and the host of Radiator Stoves of Philadelphia, all of which burn well, but require great care in mounting and putting up for use.

Stoves with ascending or direct drafts require less care, but necessarily consume more fuel.

Many who have not used the Feeder consider it merely as a convenience for feeding the fire. This is not all; its most important use is to contain a quantity of coal that is not ignited, ready to slide by its gravity into the grate, to replenish that which is burning as fast as it is consumed, and thus keep a continuous and regular fire.

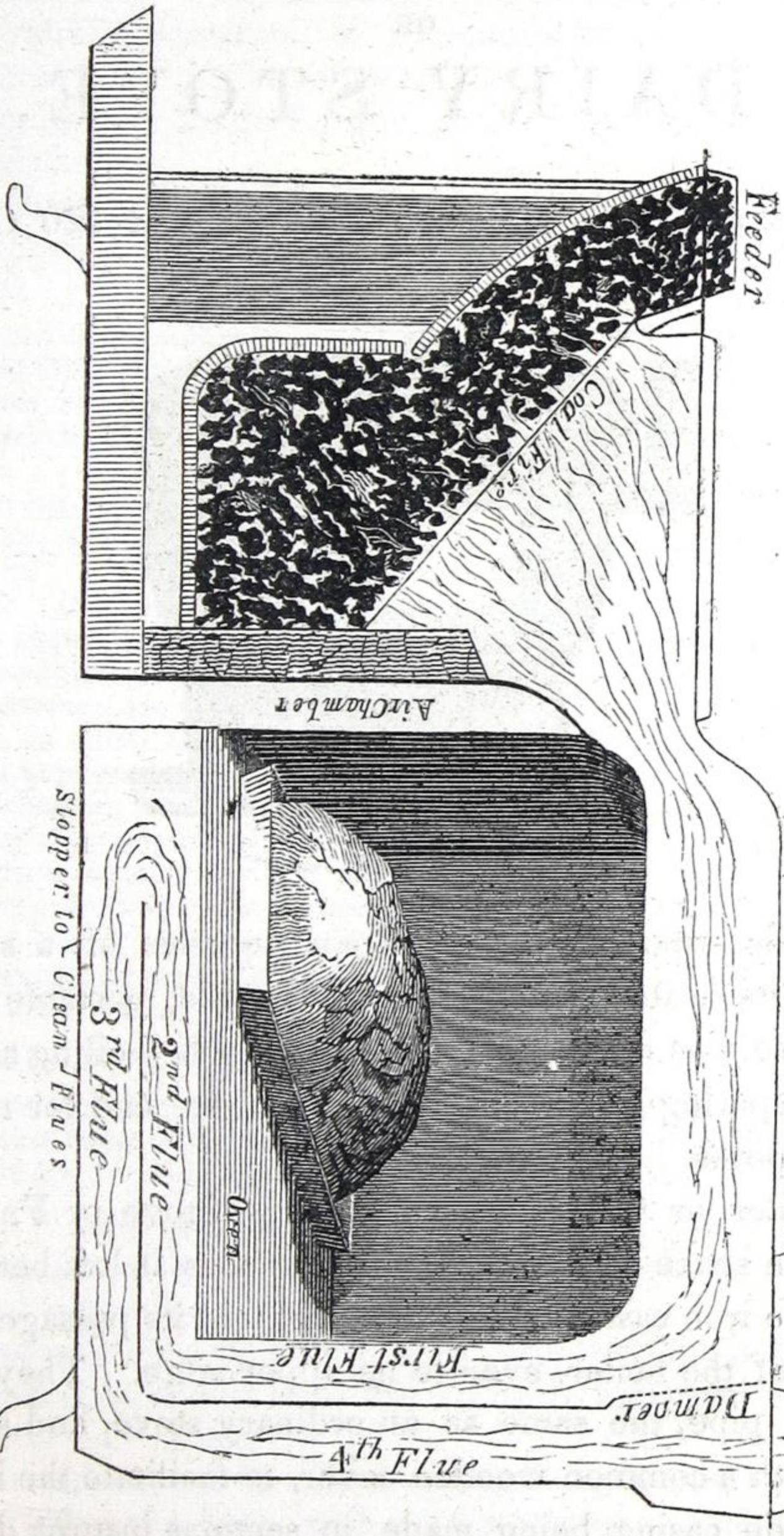
The fire is made thus: first cover the bottom of the grate with a layer of nut coal, on this put the kindling wood; as soon as the wood gets burning, sprinkle some coal lightly over it, not enough to smother the flame; then fill the Feeder with nut coal. By this plan, the fire can be made, and the breakfast ready, in as short a time as with a wood stove.

The Feeder should at all times be kept full of coal, which should not be shoved down, nor under any circumstances be put in through the boiler holes. Nut sized coal must be used.

In Baking in the Tubular Oven, or other revertible flues, the pans should set on the bottom of the oven.

In the Triumph and Operator, they may set on the slide. The dampers regulate the draughts around the oven. All stoves should have a damper in the pipe, to check the draft, when burning too freely.

The flues under the oven must be cleaned at least once every month. Those of the Tubular are very readily cleaned, by lifting the tubes out through the oven door.



If the directions be strictly followed, the coal will lay as shown in the above cut.

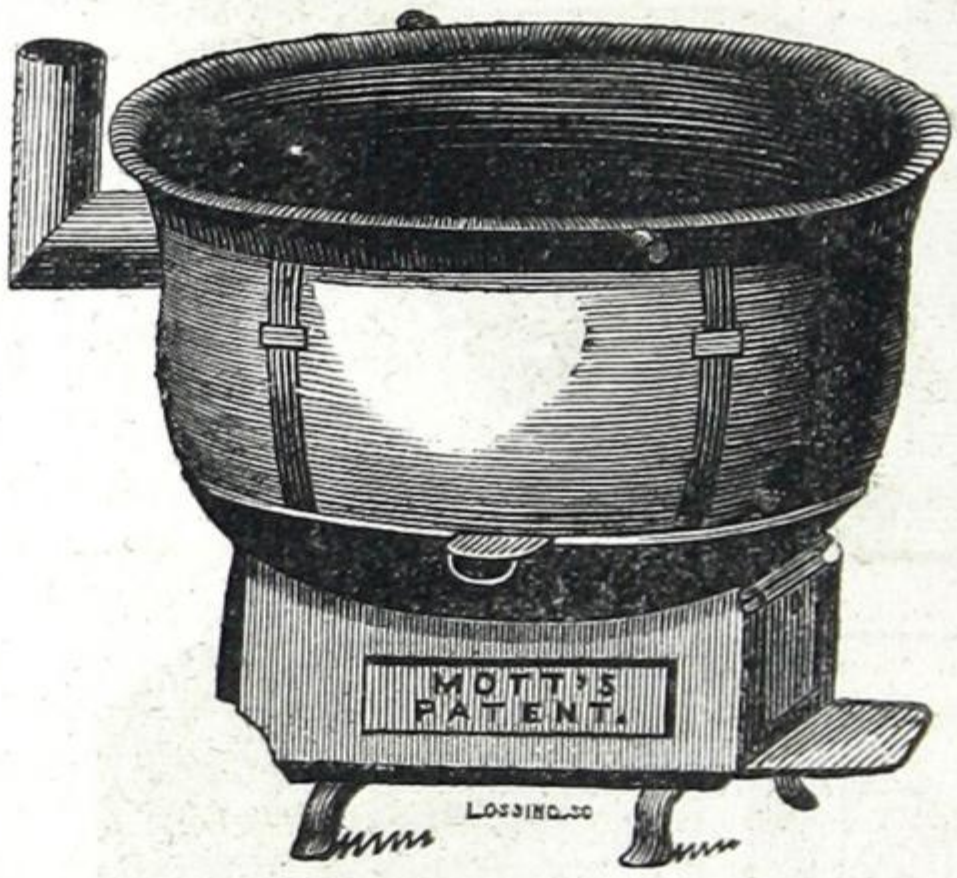
MOTT'S PATENT

AGRICULTURIST'S FURNACE,

OR

DAIRY STOVE.

Made in sizes of 15, 30, 40, 50, 60, 80, and 120 Gallons.



This article was constructed in consequence of a suggestion from the American Institute—that a simple, portable and low priced furnace was much wanted by farmers for boiling and steaming food, preparing maple or beet-root sugar, and for many mechanical purposes.

It is a Boiler or Caldron, set in an Iron Stove or Furnace, so formed that a space of from one to two inches is left between the boiler and the iron casing, causing the heat in its passage to encircle all parts of the boiler, even to its upper edge. They are used with a short pipe, the same as an ordinary stove, and should be furnished with a common wooden cover, to facilitate the boiling.

The outside casing being made in sections insures durability. Of the many hundreds sold, the proprietor has not heard of one that has broken in use.

PREMIUMS AND RECOMMENDATIONS.

In Doc. No. 63 of the Senate of the State of New-York, session of 1843, it is recommended as a valuable implement for the farmer.

The New-York State Agricultural Society awarded a silver cup.

The American Institute, a silver medal.

The Mechanics' Fair, at Boston, a silver medal.

The Franklin Institute, of Philadelphia, and thirteen County Agricultural Socteties have awarded either medals or diplomas.

No article ever made for the farmer's use has given more universal satisfaction.

The following is from that distinguished agriculturist, C. N. BEMENT, whose opinion in such matters is generally received as orthodox:

"AGRICULTURIST'S FURNACE.—A good, cheap, and durable boiler has long been sought for by the farmer. Potash kettles, caldrons, and boxes with sheet iron bottoms set in brick have been used, as well as steam boilers of various descriptions; but they all take up considerable room, are clumsy and burdensome.

"For the last seven years, I have tried all the above named articles, and have laid them by, and substituted one of 'Mott's Patent Agriculturist's Furnace and Caldron.' It will readily be perceived it has many advantages over those set in brick. It takes up but little room; is light, and may be placed on the floor; and requires no foundation to support it. Besides, being portable, it may be removed from place to place, as occasion or convenience may require; two men are sufficient to remove it. It can be made to boil, full of vegetables, in thirty minutes. In this I was most happily disappointed, for I had always supposed that brick retained the heat better than iron; and after being once heated, would require less fuel to keep it boiling.

"Another very important consideration, and will go far to recommend it, is that it requires much less wood than one of the same size and form set in brick, or even the box with a sheet iron bottom, so highly recommended in some of the former volumes of the Cultivator. Although wood may be plenty, it takes time and labor to procure it. C. N. BEMENT.

"Three Hills Farms."

Mr. Bement writes, August 8, 1843:

"After a trial of two years or more, I have found no reason to alter the good opinion I have heretofore expressed in regard to the superiority of your Furnace and Boiler over any other which has fallen under my notice."

Advantages over Caldrons set in Brick.

1. Being portable, they may be removed from place to place, as occasion or convenience may require.
2. Require only a few lengths of pipe to fit them for use.
3. The fireplace and flues are so well arranged that the consumption of fuel is less.
4. The caldron can be lifted out and in, to make any examination, or to clean the flues, without the expense of re-setting.
5. They cost less, when the expense of labor, bricks, lime, and the frequent re-settings are taken into the account.

To set a caldron with bricks in the most approved mode re-

quires an experienced workman, who cannot be obtained at all times without great inconvenience.

Those who yet prefer setting in brick, can be furnished with caldrons of either the above sizes, which may be hereafter fitted with the Iron Furnace, should the brick setting be abandoned.

Importance of Feeding Cooked Food to Stock.

Extract of a letter from Mr. Bement, dated

THREE HILLS FARM, ALBANY, August 8, 1843.

"J. L. MOTT: Dear Sir—It is generally conceded, I believe, that all kinds of food, either steamed or boiled, for the fattening of hogs, has great and decided advantages over that of raw; and the advantages are more than equivalent to the labor and expense of its preparation. It has been the practice in the Eastern States, by the most thrifty and economical farmers, ever since my remembrance, to boil potatoes, pumpkins, &c., to fatten hogs. And from my own experience and observation, I am well convinced that a great saving and a much greater growth is obtained by means of cooking food. Mr. E. Phinney, of Lexington, Mass., who has been in the practice of fattening from 75 to 100 hogs annually, and who is very nice and particular in these matters, says, in a communication to the editor of the New England Farmer: 'From long practice and repeated experiments, I am convinced that two dollars worth of material well cooked will make as much pork as three dollars worth of the same material given in a raw state.'"

Extract of a letter dated Marine, Madison county, Illinois, 3d month 30th, 1843:

"FRIEND J. L. MOTT—The importance of cooked food for hogs, particularly sows and pigs, is not sufficiently appreciated; indeed, many farmers are entirely ignorant of it. Having a large farm under cultivation in this neighborhood, I considered it an important matter, not only to get the best kinds of stock hogs, but to ascertain the best mode of feeding them, and soon found that cooked food was very superior to raw. A pig of some varieties will grow nearly twice as large in eight or ten months on cooked food as he would on raw, and upon about one half the quantity.

"The lands in this country are so very rich, and people being enabled to make a living so easy, they have neglected these important matters; but the hard times are beginning to make them more careful and economical. My anxiety to have many of thy Furnaces out here would induce me to order," &c.

(Signed) C. B. STANTON.

Extract from the Albany Cultivator, vol. 7, page 182:

"A few words will explain why cooked food is more suitable than that which is in a raw state. Raspail and Biot, by an able and curious series of experiments, proved that the nutritive power of any substance lies in the farinaceous globules, and that to be available, these globules must first have their envelope crushed, or otherwise ruptured. This is partially done by grinding, still more by mastication, but never so completely as by boiling, or subjection to an elevated temperature. In that case, the matter in the globules expands, bursts the envelope, and of course is wholly appropriated to the purposes of nourishment. Experiments, a thousand times repeated, demonstrate the justness of these conclusions, and prove that the man who attempts to fatten animals on uncooked food, overlooks the simplest principles of domestic economy."

These Furnaces are in use in every state in the Union, in Florida, in Canada, have been shipped to the West Indies, to South America, to Africa, to Europe, and to California on the Pacific—are used for nearly all purposes requiring large boilers, as may be

seen by the following list of the names of some persons who have them: Many others might be mentioned:

U. S. Fortifications, Norfolk, Va.
Hon. Joel R. Poinsett, S. Carolina.
Gen. Izard, do.
Col. F. H. Ellmore, do.
Jerome Buonaparte, Maryland.
Maj. O. Fallen, St. Louis, Mo.
Caleb N. Bement, Albany, N. Y.
W. H. Townsend, East Haven, Con.

DAIRYMEN.

A. Walker, Deerfield, Oneida, N. Y.
Duncan Burton, do. do.
Wm. Burgess, Winfield, N. Y.
H. N. Stering, Schuyler, do.
Wm. Graven, Russia, do.
C. Farrington, Schuyler, do.
David W. Felts, Frankfort, do.
Horace Wood, Schuyler, do.
N. A. Sterling, do. do.
Wm. King, West Winfield, do.
Jno. Cox, Deerfield, Oneida co. N.Y.
Thos Blue, do. do. do.
Thos. Taffner, Alder Creek, do. do.
Abm. Hall, Marcy, Oneida co. do.
George Ives, Turin, do. do.
Jno. Ainsworth, Herkimer co. N.Y.
E. M. White, Danbury, Ct.
H. D. Van Winkle, Bergen, N. J.
Mr. Cooper, Bull's Ferry.
Miles Hartwell, Pine Plains, N. Y.

BUTCHERS.

Henry Roberts, Utica, Oneida co.
Wm. Harrington, do. do.
Peter Brewer, do. do.
J. & J. Whiffin, do. do.
John Faulks, Morris co. N. J.
James Faulks, do. do.
Varian & Rollwin, New-York.

TRYING OUT LARD.

J. Golden, Utica, Oneida co. N. Y.
Thos. Horton. do. do.
M. Loughlin, do. do.
Mr. Cantel, New-York.
J. & W. Fairbrother, New-York.
Mrs. Prescott. do.
J. McChain & Co. do.

HOTEL KEEPERS.

Lewis Pond, Utica, Oneida co. N. Y.
David Wooster, Trenton, do.
Ives & Moore, New York.
Alex. Welsh, do.
John Johnson, do.
Howard House, New-York.
E. Curtis, Fort Hamilton House, S. I.

HEATING BATHS.

S. Case, Fultonville, Oswego co. N.Y.
C. W. Sandford, Sing Sing, N. Y.

FAMILY WASHING.

A. P. Cummings, Williamsburgh, L.I.
Job Crane, Essex co. N. J.
Rev. I. T. Halsey, do.
Association for the Relief of Aged Females, New-York.
Wm. W. Fox, Morrisania, N Y.
F. Knowles, New-York.

MAKING SOAP.

H. Greenman, Utica, Oneida co. N.Y.
Mr. Bartlett, Elizabethtown, N. J.
Mr. Tarde, New-York City.

COTTON FACTORY.

A. G. Washburne, Butternuts, Otsego co. N. Y.

PAINTERS.

Wm. Concklin, Utica, Oneida co
James Peach New-York.

DRUGGISTS.

Rushton & Co. New-York.

MELTING LEAD.

E. Wildes, New-York.
Geo. Jardine, do.
Jas. E. Serrell, do.

DYERS.

C. M. Farnsworth, New-York.
F. Marwedels, do.

BAKERS.

Mumby, Brooklyn, N. Y.
Troughton, New-York.

MILKMEN.

H. Halbert, Utica, Oneida co. N. Y.
Thos. Welstead, L. I.
Sandford Mead, Greenwich, Ct.
E. Husted, do.
Wm. Williams, Bedford, L. I.
Jas. McIntyre, New-York.

PLANTERS.

B. C. Hough, Hawkinsville, Geo.
Hand & Scranton, Augusta, Geo.
C. H. Hunt, Fredericksburgh, Va
W. E. Jordan, Portsmouth, Va.
Jno. R. Todd, Petersville, Va.
Joseph Mason, Petersburgh, Va.

John Donnelly, Brazil.
Mr. Kelly, Sleepy Hole, Va.
Col. Lewis Morris, Charleston, S. C.

OIL DEALERS.

R. Salisbury, Providence, R. I.
Lyle & Polhamus, New-York.
Frederick Hudley, do.
L. Wallis, Martin & Co. Philadelphia.
Colborne & Van Wyck, New-York.
E. & T. Roberts, do.
E. W. Van Voorhis & Co.

FARMERS.

Wm. H. Slater, Poughkeepsie, N.Y.
Jno. Cooper, Oyster Bay, L. I.
Thos. Hunt, Shrewsbury, N. J.
J. Cowpenthwait, Eden Hill Farm, Pa.
Jones, Spooner near Worcester, Mass.
John Gilbert, Bergen, N. J.
L. Mitchell, Manhasset, L. I.
F. Nostrand, do.
Jacob Mott, Tarrytown, Westchester co. N. Y.
H. I. Seaman, Staten Island.
I. H. French.
Wm. H. Morris, Morrisania, Westchester co. N. Y.
R. Crosby, Skaneateles, N. Y.
C. M. Desmarest, Woodbridge, N. J.
Welsh & Co. Milton, Ct.
J. W. Avery, Groton, Ct.
Barron, Newtown, L. I.
H. King, Bristol, Pa.
Cook, Derby, Ct.
Higbie, Rockaway, L. I.
Benj. F. Jewit, Utica, Oneida co. N.Y.
A. Brockway, Bridgewater, do.
G. G. Morton, Utica, do.
C. Adams, Verona, do.
Lorenzo Rinse, Marshall, do.
Jno. S. Churchill, Boonville, do.
R. B. Miller, do. do.
Thompson Philips, Steuben, do.
I. Pierce, Stillville, do.
I. R. Fox, Winfield, Herkimer co.
David Wager, Utica, Oneida co.
Dr. Jno. Tilworth, Deckertown, Sussex co. N. J.
I. Peters, Darien, Genesee co. N. Y.
D. Woods, Goshen, N. Y.
Richard Townley, Essex co. N. J.
Townley Mulford, do.
John Crane, do.
John R. Miller, do.
E. Lord, Piermont, Rockland co. N.Y.
Robert A. Taylor, Baltimore, Md.
Sackett, Westchester, N. Y.
Scofield, Morristown, N. J.
A. R. Mount.
Doct. Taylor, Seguine's Dock, S. I.
W. C. Chapin, Providence, R. I.
J. M. McFerran, Danville, Ky.

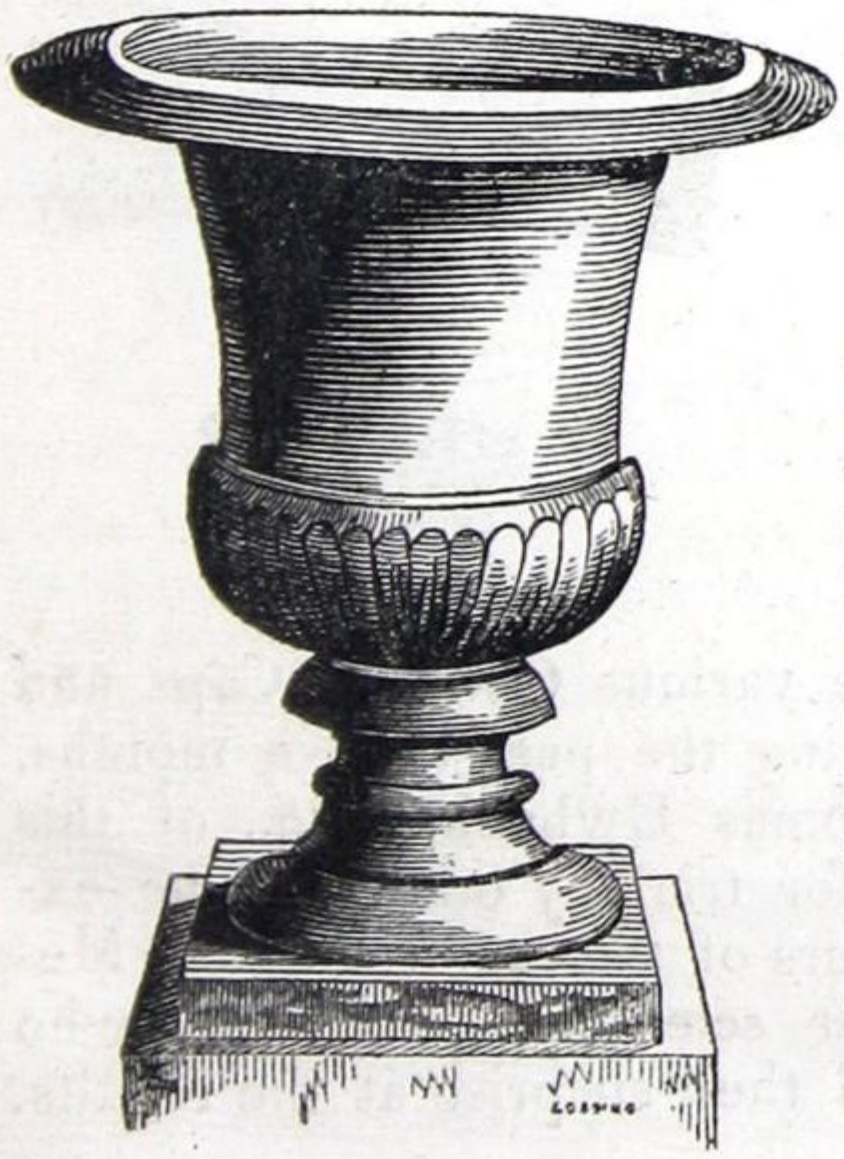
FOR PURPOSES UNKNOWN.

A. W. Turnbull, Eastchester, N. Y.
Saml. L. Stevens, Hallett's Cove, L.I.
Jno. Brill, Newark, N. J.
J. Bower, New-York.
H. S. Leverich, Newtown, L. I.
Rev. Saml. Osgood, Springfield, Ms.
Bodwell, Orange, N. J.
Thos. Reed, Providence, R. I.
R. H. Johnson, Freehold, N. J.
Roswell Raymond, Norwalk, Ct.
J. D. Sparkman, New-York.
E. F. Wickham, Rocky Mills, Hanover co. Va.
W. C. Houseman, Haverstraw, N.Y.
Jno. C. Jackson, New-York.
D. S. Carr, Custom House, Baltimore, Md.
W. W. Mills, Stony Brook.
E. Russell, New Rochelle, N. Y.
Jacob Covert, Manhasset, L. I.
Henry Lawrence, Bushwick, L. I.
Alfred Battle, Tuscaloosa, Ala.
R. A. Dermy, New Brunswick, N. J.
Richard Jones, Brooklyn, L. I.
B. Burrough, Bedford, L. I.
Henry Bergen, Newtown, L. I.
M. P. Baker, Williamsburgh, L. I.
E. D. Hunter, New Rochelle, N. Y.
A. Trehund, New-York.
Jones & Robins, Hartford, Ct.
S. H. Piper, New-York.
I. H. Smith, Brooklyn, L. I.
Wm. C. McGee, New-York.
Weyd & Co. do.
H. Tarbox, Lisbon, Ct.
H. Cunningham, New-York.
Chs. H. Metcalf, Fly Creek, Otsego co. N. Y.
T. B. Buffum, Newport, R. I.
S. Beal, do.
Henry Cook, Alexandria, D. C.
A. Ramsey, New-York.
Baldwin & Beers, Newton, Fairfield co. Ct.
Jews' Synagogue, Attorney st. N.Y.
Rodolph Sholom Synagogue, N. Y.
A. Lockwood, New-York.
T. Monahan, New-York.
Mr. Peck, Brooklyn, L. I.
Wm. Poulson, New-York.
M. O. Halstead, do.
E. Stiles, do.
John Dewitt, West Point, N. Y.
John Branch, New-York.

Salamander Works, Woodbridge, New-Jersey.
Rev. W. A. Muhlenburgh, St. Paul's College, Flushing, L. I.
P. H. Foster, Brooklyn, L. I.
I. E. Hornbeck, Rochester, Ulster co. N, Y.
Joseph Tyrrell, Trenton, N. J.
A. Broadway, New-York.
S. Mordecai, Petersburgh, Va.
E. Sammis, Huntington, L. I.
Thos. Horton, Mamaroneck, N. Y.
S. Story, New-York.
W. D. McDowall, Camden, S. C.
S. T. Jones, New Brighton, S. I.
Mr. Peck, Brooklyn, L. I.
Geo. Willetts, Cow Neck, L. I.
Wm. H. Grieff, New-York.
Wm. H. Rundell, Stonington, Ct.
Thompson & Hart, New-York.
Mr. Dorrington, do.
Dickson & Babcock, Vicksburg, Va.
S. Nichols & Co. Danbury, Ct.
W. Flavell, Paterson, N. J.
Theodore Schwartz, New-York.
Wm. Janeway, New Rochelle, N. Y.
M. Parsons, Newtown, Ct.
Jas. L. Colman, Augusta, Geo.
S. C. Tilley, Glen Cove, L. I.
Duncan & Cunningham, Bellville, New-Jersey.
E. Bleck, New-York.
J. H. Shorter, Columbus, Geo.
John Smith, Bloomingdale, N. Y.
R. Ward, Ridge, Edgefield District, S. C.
John Moore, New-York.
F. Clark, do.
O. Elliot, Elizabethtown, N. J.
Simons & Barnwell, Charleston, S.C.
M. Leach, Union Springs, Saratoga, N. Y.
D. S. Halloway, Newport, R. I.
H. Robinson, Bridgeport, Ct.
D. E. Roberts, Brooklyn, L. I.
Mr. Ferris, Greenwich, Ct.
Titus, Sweet & Co. Poughkeepsie, N. Y.
A. Lines, New-York.
Wm. G. Bliss, Cabotsville, Mass.
A. White, Danielsonville Depot, Ct.
J. Bratingham, Plainfield, N. J.
B. Gill, Poughkeepsie, N. Y.
Wm. Rankin, Newark, N. J.
Jonas W. Burton & Co. Leeksville, N. C.
Mr. Martin, New-York.
Harris Keis, West Killingsly Depot, Ct.
S. Covell, New-Rochelle.
E. H. Kimball, New-York.
C. G. Garretson, Paterson, N. J.
Jules Hanel, Philadelphia, Pa.

☞ *For additional references, see third page of cover.*

CAST IRON GARDEN VASES.



The following description is from the January number of the New-York Cultivator:

"The Cast-iron Vases exhibited by Mr. J. L. Mott, of New-York, at the Fairs of the State Agricultural Society and American Institute, and to which honorary premiums were awarded in both places. In pattern equal to the finest Italian models, in durability far their superior, and embracing imitations of freestone, granite and marble. The cheap rate at which they can be furnished is another and not a small recommendation of the invention of Mr. M."

The Vase is 30 inches high, and 25 inches diameter. Many are used in Hotels, for Counter Vases.

CAST IRON BATH TUBS.

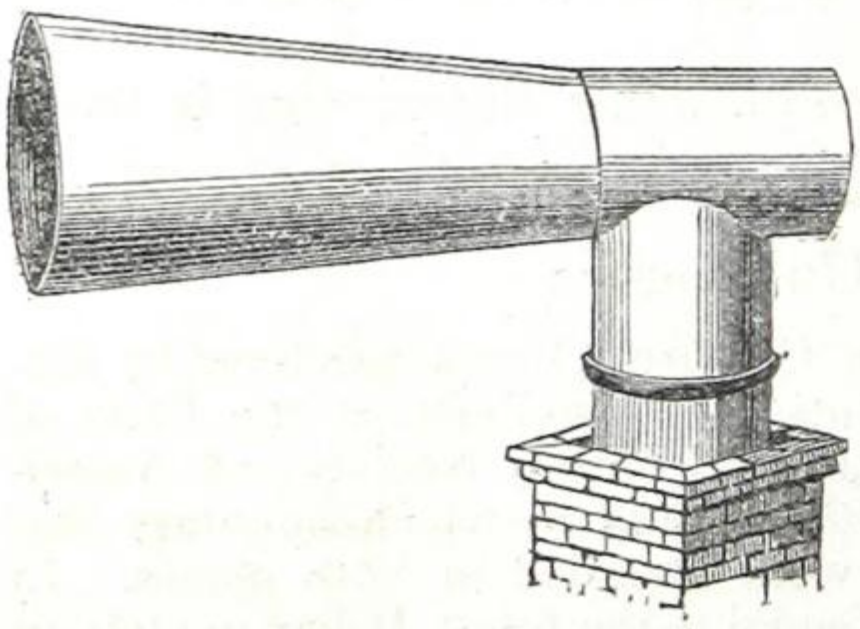
Patented in 1843.

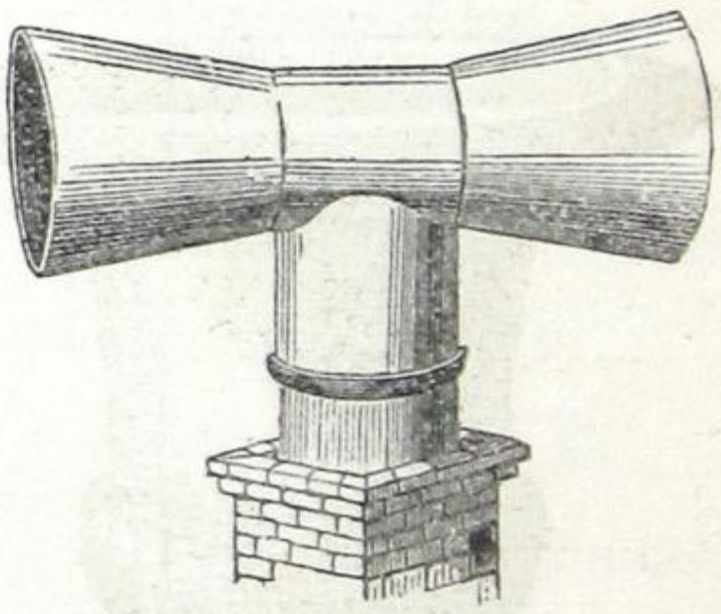
This is a new article, for which the Institute awarded a Silver Medal. They are painted or japanned, and have every advantage over those of tin, wood lined with lead, or even marble. The form is such that they require the least possible quantity of water, are more sightly, durable, and less costly. They set on feet like stoves, and can be moved about at pleasure, as they are not so heavy as those of wood lined with lead.

Six of the public bathing houses in this city are furnished in whole or in part with these tubs. Persons about buying are earnestly advised to see these before purchasing. Where their superiority is known, they take the preference of all others. Heed not the stories of those whose business interest they affect.

VENTILATORS,

For increasing the draft of Locomotive and other Steam Engines, and for Ventilating the Cabins of Steamboats, Railroad Cars, large Buildings, Ships, Hospitals, Mines, and for Curing Smoky Chimneys.

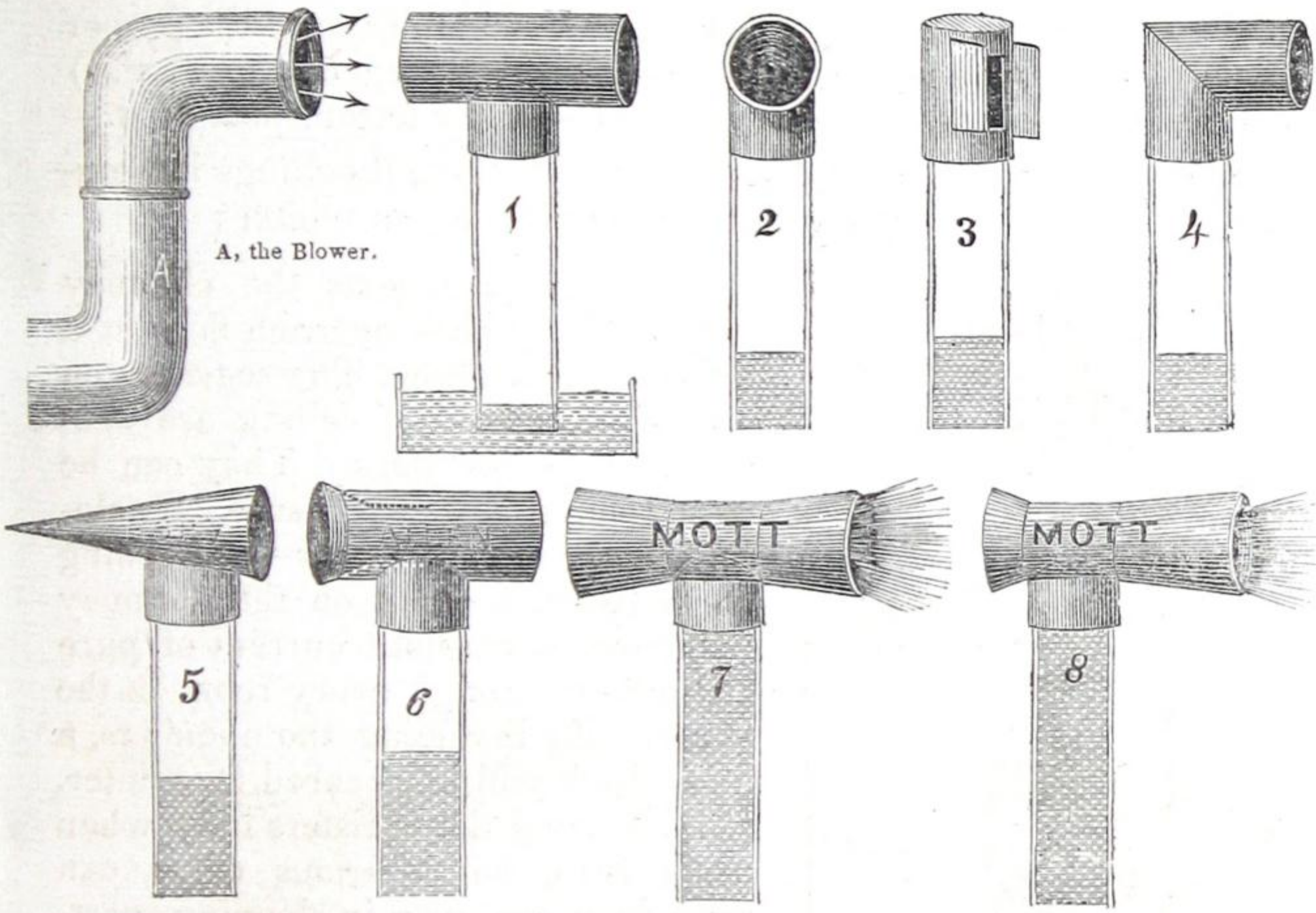




To test the relative value of the various Chimney Caps and Ventilators in use, I have made, during the past twelve months, many experiments, assisted by Thomas Ewbank, Esq., of this city. Many Caps were sent to me for trial by others. The experiments were witnessed by members of the American and Mechanics' Institutes, and several other scientific gentlemen, who were much interested, and expressed their surprise at the results.

Trials were made in the following manner: A glass tube, of 1 inch bore, and 18 inches long, was provided; on the top of this tube the various caps were placed; the lower end of the tube was immersed in a vessel of water, the upper end with the cap, each in turn, was placed in the blast produced by a blowing apparatus driven by a six horse steam engine, used for melting iron in my foundry at Morrisania. The blast was through a six inch pipe contracted to three inches, the Caps being placed about 12 inches from the pipe, so that the wind could have free action on the outside as well inside of those Caps that were hollow.

More than one hundred Caps were tried, consisting of the various kinds in use in this country and in Europe. The experiments were repeated several times with the same results. The mode of experimenting is here illustrated:



The results with the better kinds in use were as follows: (the dark part of the tube showing the height the water was raised:)

No. 1. is a common T, with the cross-pipe of a continuous diameter. When the blast was directly through the cross-pipe, it had a tendency to depress the water in the glass tube.

No. 2. is the same cap turned at a right angle to the wind, when the water rose from 1½ to 2 inches.

No. 3. is a well-known and common cap. With this the water rose from 2 to to 2½ inches.

No. 4. is a common elbow, with the blind side to the blast. The water rose from 1½ to 2 inches.

No. 5. is the conical ventilator, with the point to the wind. The water rose 3½ inches. This cap was tried with the side forming a right angle with the blast; in that position the water rose 5 inches.

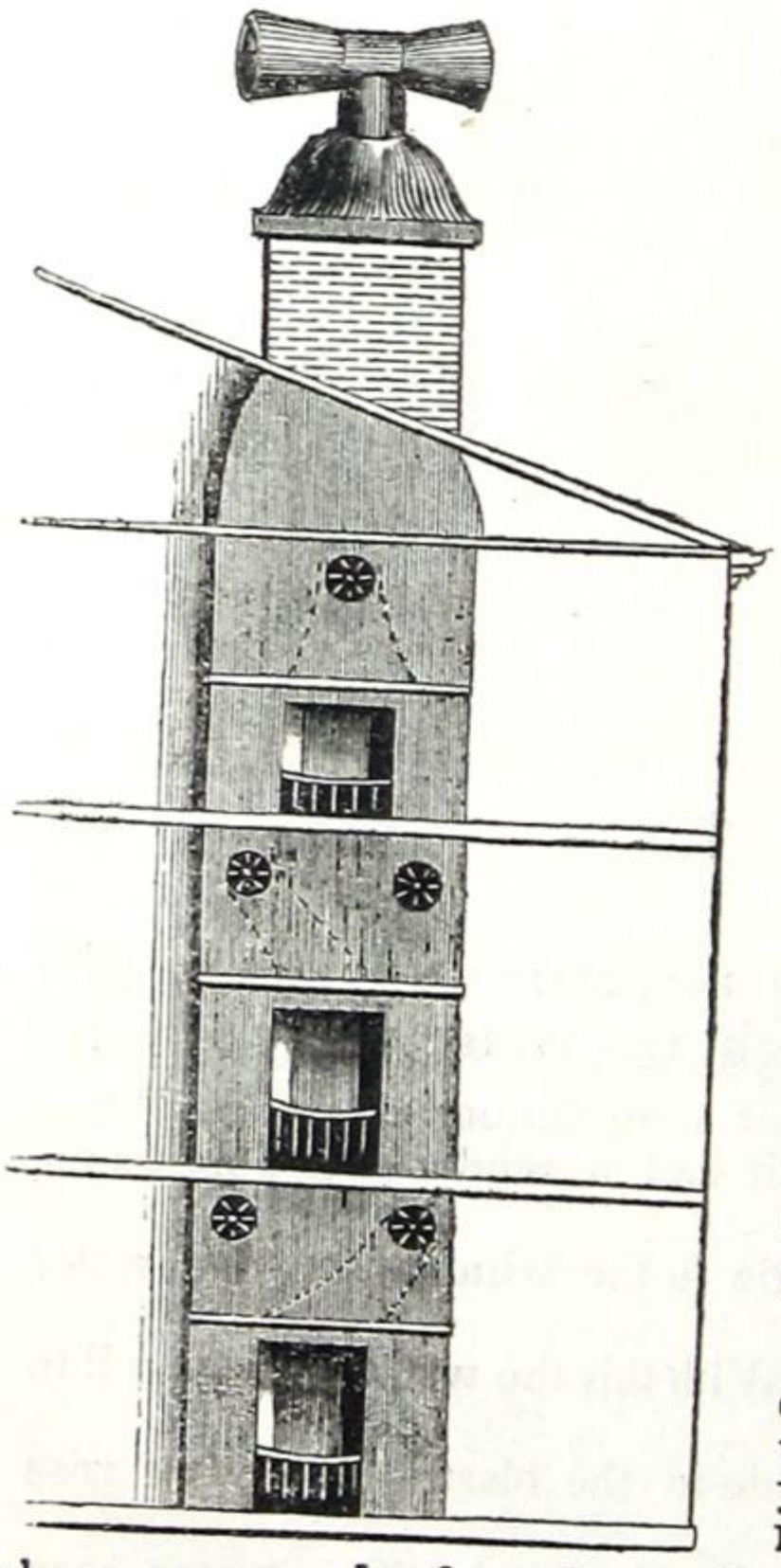
No. 6. is a cap much used and highly prized in Boston, and other places in the Eastern States. It has a small tube in the end next the blast, opening in the large cross cap, as shown by the cut. With this the water was raised 4½ inches, which was higher than any other (except with the cone, when placed with its side to the wind,) previous to the trials with 7 and 8.

No. 7. it will be seen is two conical frustrums, joined at their smaller ends to a centre cross-pipe. With this cap, either end to the wind, the water rose to the full length of the glass tube, 18 inches, and was blown out the opposite end. Trial was made again and again with this cap, at a right and other angles to the blast, and in every instance the water was raised from 7 inches upwards. A board was placed behind, on the side, and in every mode, to break or deflect the blast, yet the water rose in the tube. This is a very simple cap, easy of construction, and not likely to get out of order, as it differs from most others in being *stationary*.

No. 8. is a single conical frustrum, with the smaller end to the wind; the effect was the same as in No. 7. With the open end to the blast, the water was raised the length of the tube, and blown out the opposite end.

Nos. 7 and 8 were both patented on the 17th of December, 1842. Rights for both or either (with instructions as to the proper angle of enlargement, as much of the effect depends upon this) will be sold very low upon application—if by letter, post paid.

The following plan is proposed to ventilate dwellings in summer, and to secure a good draft to the chimney in winter:



The cut represents the chimney with the fireplaces on each floor of a three-story dwelling. The registers on each side under the ceiling are connected with the flues. They can be closed or opened at pleasure. By closing the grate in summer and opening the register, the cap on the chimney will cause a constant current of pure air to flow through every room in the house. By reversing the openings, a good draft will be secured for winter.

By leaving the registers open when using fires, no injurious effect can arise from gas, even in sleeping apartments.

For the great importance of ventilating dwellings, see the very able report of the late City Inspector, Doctor Griscom, published last spring.

The Cap figured on the chimney is one designed to be made of cast iron. It will set over the mason work, bind it together, protect all from the weather, secure draft and ventilation and make a handsome finish.

AGRICULTURIST'S FURNACE.

List of References, continued from page 21.

E. A. Smith, Columbus, Miss,
Hogan & Lyon, Tuscaloosa, Ala.
Bush, Brothers & Co, Pickensville, Alabama.
Mancken & Paff, New-York.
H. H. Dow, Brooklyn, L. I.

R. Taylor, Bethel, Ct. hatter,
E. Timpson, New-York, trunkmaker.
Noah Clapp, Troy, NY. boiling hair.
J. Winchester, New-York, composition rollers.
J. McGraw, New-York, cement.
Thos. Shipway, do. root beer.
Geo. F. Cooledge, do. paste.
T. P. Merriam, New-Bedford, oil of tannin.
Weed & Waters, Troy, druggists.
J. Q. Van Nest, Corinth.
F. H. Rathbone, Chatham.
R. Hawley, Troy.
M. D. Dyer, Union Village, Washington, N. Y.
Almon Smith, West Berkshire, Vt.
David Anthony, Union Springs.
Thomas Welling, Pittstown.
D. H. Burtis, Macedon.
Whiting & Co. Bath, Steuben, N.Y.
E. Blackman.
C. M. Vandenbergh, Greenbush.
J. A. Waterbury, Saratoga Springs.
B. Slade, Waterford.
Whitney, Ayers & Starles, PenYan.
L. Perry, Champlain.
J. L. Whiting & Co, Kinderhook,
Wm. Broughton, do
I. Ring, do
Bidwell & Morrison, Brunswick.
J. D. Hart, Mechanicsville.
Charles S. Smith, Grafton.
G. McMillgan, Auburn.
L. Janes, Georgia, Vt.
N. Bradt.
A. Wheeler & Son, Montgomery, Vt.
R. Seamans, Warren co.
J. Carpenter & Son, Richford, Vt.
S. W. Smith, Stillwater.
Wm. W. Wells, Waterbury, Vt.
Wm. Titus. Cayuga co.
Mr. Hoyt, Plattsburgh.
E. Carleton, Brunswick.
Patrick McGill, Cambridge,
J. Chaffee, West Berkshire, Vt.
J. H. Wilner, Troy.
Sexton & Butterfield, Palmyra.
R. R. Kennedy, Clifton Park.
L. A. & A. H. Orcutt, Wardsboro', Vermont.
C. F. Crosby.
J. McChesney, Brunswick.
G. H. Phelps, Lee, Mass.
Gilbert Starbuck, Chester, Warren county.
Charles Bonesteel, Schaghticoke.
John Ford, Troy.
P. Hammond, Windham, Vt.
George Coonrod, Brunswick.
Isaac Brownell, White Creek.
J. & T. Archibald, Troy.
Jona Brooks, Lansingburgh.
Wm. McAuley, Jr. N. Adams, Ms.
B. C. & H. L. Beard, Fayetteville, New-York.
O. Peck & Co. Lenox, Ms.
Milo Lewis, Berkshire, Vt.
J. Matthewson, Montreal, L. C.
Benajah Allen, Grafton.
J. Hall, Troy.
Elias Gates, Troy, taken to Springfield.
Granger & Ball, G. Rapids, Mich.
John R. Williams & Co. do.
Lorenzo Brown, Buffalo, N. Y.
Thomas Bullymore, do.
J. McCollister, Wayne co, Mich.
E. Folsom, Michigan City.
J. S. Provoost, Buffalo.
G. S. Hubbard, Chicago.
Wm. Sternberger, do.
John Harsen, Buffalo.
J. Cram, Detroit.
Thomas R. Stocking, Buffalo.
Mr. Caldwell, Sandusky, Ohio.
Mudge & Shaw, Pittsburgh, Ia.
P. J. & P. O. Neil, Toronto, U. C.
J. Pierce, Chippewa, do.
M. C. Grier, Hamilton, do.
Benson Abbott, do. do.
A. J. Grospelius, Burford, do.
Mr. Bryant, St. Cath. do.
John Carroll, Niagara, do.
Benj. Corwin, do. do.
Thadeus Hickock, Concord.
Ezekiel Adams, do.
Warren Granger, Black Rock.
Hull & Morse, Angelica.
C. C. Bristol, Buffalo.
Amos Allen, Boston.
Stephen Morris, Niagara Falls.
L. & L. H. Shepard, Lewiston.
Cyrenius Gleason, Sardinia.
S. Burnham, Dunkirk.

THE ARTICLES DESCRIBED WITHIN

ARE SECURED BY OVER

THIRTY PATENTS!

SINCE THE FIRST OF SEPTEMBER, 1843,

NINE OTHER PREMIUM

HAVE BEEN AWARDED, VIZ:

FIVE by the American Institute, New-York.

THREE by the Franklin Institute, Philadelphia.

ONE at the Fair at Wilmington, Del.

Iron Founders and others

Will be furnished with Castings for Patterns, including righ for any of them, upon reasonable terms. About twenty ha already secured the privileges.

N. B.—All letters must be post paid.

The proprietor is anxious to make arrangements for the s of his articles by one responsible house only in each pla Being secured by patents either for the inventions or the desig under the new law, a uniformity in price may be maintain If early orders be given in the Spring, he will make the pri an inducement.

The assortment cannot be excelled by any manufacturer in t Union.

J. L. MOTT.

Windt's Printery, 99 Reade Street, N. Y.